

IN THE CLAIMS

Please amend the claims as follows:

Claim 1-3 (Canceled):

Claim 4 (Currently Amended). A diffraction element comprising:

a substrate with an incoming-side surface opposite to an outgoing-side surface, the incoming-side surface configured to receive light from a light source external to the substrate;

an incoming-side diffraction grating having a concave/convex shape in cross-section disposed in a central region of the incoming-side surface;

a first outgoing-side diffraction grating having a concave/convex shape in cross-section disposed in the outgoing-side surface and configured to receive light not diffracted by the incoming-side diffraction grating; and

a second outgoing-side diffraction grating covered by a reflective layer and having a concave/convex shape in cross-section, the second outgoing-side diffraction grating positioned on a light path of a light diffracted by said incoming-side diffraction grating, a grating pitch of the incoming-side diffraction grating being substantially equal to a grating pitch of the second outgoing-side diffraction grating,

wherein the incoming-side diffraction grating is configured relative to the light source such that only a center portion of the external light, having a stronger intensity than a peripheral portion of the external light, is passed through not diffracted by the incoming side diffraction grating.

Claim 5 (Previously Presented): The diffraction element according to Claim 4, wherein the second outgoing-side diffraction grating forms a reflection type diffraction grating.

Claim 6 (Previously Presented): The diffraction element according to Claim 5, wherein the second outgoing-side diffraction grating has a saw-tooth concave/convex portion

or a pseudo sawtooth diffraction grating wherein a saw-tooth shape is approximated by stairs.

Claim 7 (Previously Presented): The diffraction element according to Claim 5, wherein the second outgoing-side diffraction grating comprises a pseudo sawtooth diffraction grating having a saw-tooth shape approximated by stairs, and a height or depth of a first step of the stairs is different from a height or depth of a second step of the stairs.

Claim 8-11 (Canceled)

Claim 12 (Currently Amended): A method of diffracting light with a diffraction element including diffraction gratings having concave/convex shapes in cross-section formed in an incoming-side surface and an outgoing-side surface of a transparent substrate, in which the incoming-side surface is opposite the outgoing-side surface, and the incoming-side surface is configured to receive light from a light source external to the diffraction gratings, the diffraction gratings including,

an incoming-side diffraction grating disposed in a central region of the incoming-side surface,

a first outgoing-side diffraction grating disposed in the outgoing-side surface and configured to receive light diffracted by the incoming-side diffraction grating, and

a second outgoing-side diffraction grating covered by a reflective layer, the second outgoing-side diffraction grating positioned on a light path of a light diffracted by said incoming-side diffraction grating, a grating pitch of the incoming-side diffraction grating being substantially equal to a grating pitch of the second outgoing-side diffraction grating, the first and second outgoing-side diffraction gratings having a saw-tooth concave/convex portion or a pseudo sawtooth diffraction grating wherein a saw-tooth shape is approximated by stairs, and

wherein the incoming-side diffraction grating is configured relative to the light source such that only a center portion of the external light, having a stronger intensity than a

peripheral portion of the external light, is ~~passed through~~ not diffracted by the incoming side diffraction grating, the method comprising:

directing to a wavelength measuring apparatus light diffracted by the first and second outgoing-side diffraction gratings.

Claim 13 (Previously Presented): The method according to claim 12, wherein the incoming-side diffraction grating has a saw-tooth shape.

Claim 14 (Currently Amended): A diffraction element comprising:

a substrate having first and second surfaces opposite one another;
a first diffraction grating disposed in a central portion of the first surface, the first diffraction grating configured to receive light from [[from]] a light source outside of the substrate, the first diffraction grating having a first grating pitch;

a second diffraction grating disposed in the second surface, the second diffraction grating configured to receive light not diffracted by the first diffraction grating, the second diffraction grating having a second grating pitch substantially equal to the first grating pitch;
and

a third diffraction grating, covered by a reflective layer, disposed in the second surface, the third diffraction grating configured to receive light diffracted by the first diffraction grating, wherein

the first diffraction grating is configured relative to the light source such that only a center portion of the light from the outside, having a stronger intensity than a peripheral portion of the light from the outside, is ~~passed though~~ not diffracted by the first diffraction grating.

Claim 15 (Previously Presented): The diffraction element according to Claim 4, wherein the incoming side diffraction grating and the first outgoing-side diffraction grating are arranged in a main axis of the external light, both diffraction gratings being centered on

the substrate.

Claim 16 (Cancelled).